

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:  
Condon, Pat et al  
Serial No. 09/467,706  
Filed: December 20, 1999  
For: APPARATUS AND METHOD FOR  
CONFIGURING COMPUTERS  
Confirmation No.: 2712  
Group Art Unit: 3622  
Examiner: Retta, Yehdega

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**BRIEF OF APPELLANT**

This brief is submitted in connection with an appeal from the Final Rejection of the Examiner mailed to the Applicants on June 13, 2006, finally rejecting claims 1, 4, 12-16 and 19, all of the pending claims in this application. Two additional copies of this Brief are submitted herewith.

## REAL PARTY IN INTEREST

The real party in interest is Dell Products L.P., a Texas Limited Partnership, having a principal place of business at One Dell Way, Round Rock, Texas 78661, United States of America.

## RELATED APPEALS AND INTERFERENCES

There are no related appeals and no related interferences regarding the above-identified patent application.

## STATUS OF CLAIMS

The status of the claims is as follows:

Claims 1, 4, 12-16 and 19 are pending in the application and are rejected.

Claims 2-3, 5-11, 17-18 and 20-22 are canceled.

Claims 1, 4, 12-16 and 19 are being appealed.

Claims 1, 4, 12-16 and 19 are set forth in Appendix A, attached hereto.

#### STATUS OF AMENDMENTS

A Final Office Action was mailed to Applicants on June 13, 2006, finally rejecting claims 1, 4, 12-16 and 19.

A Notice of Panel Decision from the Pre-Appeal Brief Review was mailed on September 25, 2006, indicating that claims 1, 4, 12-16 and 19 are rejected and that the application remains under appeal because there is at least one actual issue for appeal, and requiring Applicants to submit an Appeal Brief in accordance with 37 CFR §41.37.

#### SUMMARY OF THE CLAIMED SUBJECT MATTER

The present invention, in one embodiment, as now set forth in independent claim 1, relates to a method of automatically manufacturing a computer comprising:

    a manufacturer providing a manufacturer web page unit, a manufacturer office unit and a manufacturer plant; (p. 6, lines 6-14, Fig. 2)

    a customer sending a main order for the computer to the office unit via a web page in the web page unit, the customer being required to indicate if a special configuration is desired; (p. 5, lines 5-19, Fig. 1)

    passing elements of the main order to a control unit in the manufacturing plant unit; (p. 6, lines 24-25)

    the control unit controlling manufacturing and supply lines containing a plurality of compatible hardware and selected software components for installation into the computer being manufactured; (p. 6, line 27 to p. 7, line 3)

    the customer entering any special configuration details to the web page unit; (p. 7, lines 4-7)

    passing the web page to a modification unit in the office unit; (p. 7, lines 12-13)

passing the special configuration details to a validation unit in the office unit; (p. 7, lines 13-15)

the validation unit checking the special configuration details for compatibility with details of the main order; (p. 7, lines 15-19)

upon validation, sending the special configuration details to the control unit; (p. 7, lines 20-21)

the control unit detecting any modification details in the main order details and obtaining corresponding configuration details from the modification unit; (p. 7, lines 21-23)

the control unit checking the configuration details with a factory database for implementation; and (p. 7, lines 23-25)

the control unit entering appropriate data into the computer being manufactured including entering modification details in appropriate ones of the selected software components which are being installed or have been installed in the computer. (p. 7, line 25 – p. 8, line 2)

#### **GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

1. Whether claims 1, 4, 12-16 and 19 are unpatentable under 35 U.S.C. 103(a) over Dharnipragada (U.S. 6,490,493) in view of Kroening et al (U.S. 6,080,207) (Kroening) further in view of Knowles et al (U.S. 6,182,897) (Knowles).

#### **ARGUMENT**

Independent claims 1 includes: a manufacturer providing a manufacturer web page unit, a manufacturer office unit and a manufacturer plant; a customer sending a main order for the computer to the office unit via a web page in the web page unit, the customer being required to indicate if a special configuration is desired; passing elements of the main order to a control unit in the manufacturing plant unit; the control unit controlling manufacturing and supply lines containing a plurality of compatible hardware and selected software components for installation into the computer being manufactured; the customer entering any special configuration details to the web page unit; passing the web page to a modification unit in the office unit; passing the special configuration details to a validation unit in the office unit; the validation unit checking the special configuration details for compatibility with details of the main order; upon validation,

sending the special configuration details to the control unit; the control unit detecting any modification details in the main order details and obtaining corresponding configuration details from the modification unit; the control unit checking the configuration details with a factory database for implementation; and the control unit entering appropriate data into the computer being manufactured including entering modification details in appropriate ones of the selected software components which are being installed or have been installed in the computer.

Claims 1, 4, 12-16 and 19

The Examiner relies on Dharnipragada, Kroening and Knowles and takes the position as follows:

"Dharnipragada teaches a method comprising: manufacturer providing a manufacturer's interface (user computer 10), a manufacturer office unit and a manufacturer plant (see col. 3 lines 13-14); passing elements of the main order to a control unit, controlling manufacturing and supply lines containing plurality of hardware and software components (see col. 8 line 63 to col. 9 line 10); customer entering a special configuration details in the computer (see col. 5 line 1 to col. 6 line 19), passing the order to modification unit (col. 5, lines 50-67); checking the special configuration details for compatibility with a main order (col. 5, lines 5-25); passing the order to a modification unit and then to a validation unit (col. 5, lines 5-25); making configuration details available to a control unit (col. 9, lines 1-15); detecting modification flag and obtaining corresponding configuration details (col. 4, lines 10-30, col. 5, lines 30-50); checking configuration details with a database to determine implementation (col. 7, lines 1-63). Dharnipragada teaches logging modifications as they are made (built database see col. 6 lines 47-65). Dharnipragada teaches during the technology selection, the software will provide a variety of recommendations such as selecting a different product or configuration to meet the process requirements and validation checks, etc., (see col. 8 lines 44-62). Kroening teaches the image builder goes through the baseline image file by file and identifies those areas that are different and determines what parts are to be replaced. Further Kroening teaches the image builder determines changes to be made in registry settings and in interrupt settings so that the new software configuration will operate properly on the computing system and if the desired software configuration is not compatible with the hardware of the computer system then the image builder rejects the bill of material as a non-functional configurations (see col. 5 lines 17-35 and col. 7 lines 22-40). It is known in the art to utilize systems comprising a database that

maintains a list of compatible components and required testing procedures for the associated components that may be performed during installation to more efficiently produce build to order computer systems. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention for manufacturers, as in Kroening and Dhamipragada, to make sure the supply lines contain a plurality of compatible hardware and selected software components for installation into the computer being manufactured in order to install hardware and software that have compatibility with components included within the computer being manufactured for the purpose of having a system that operates correctly and is free of malfunctioning components."

"Kroening teaches manufacturing ,a computer system and entering appropriate data including details into the computer being manufactured (abstract, summary). It would have been obvious to one having ordinary skill in the art at the time of the invention to have adopted the system of Dhamipragada for manufacturing a computer as in Kroening since Dhamipragada is not limited as to the type of manufacture (col. 9, lines 40-60) and since Kroening would have benefited from the guidance, verification and ordering of Dhamipragada in simplification of specification of the computer and management of the built computers."

"Knowles teaches providing a manufacturer web page for entering orders and passing the web page order to manufacturer unit or plant (see abstract, summary, col. 3 line 65 to col. 4 line 6, lines 36-50). It would have been obvious to one having ordinary skill in the art at the time of the invention to provide a web page for sending the order of Dhamipragada since a web page provides easy access to different page with the site, such as credit card transaction or tracking progress of the order via the web site maintained by the manufacturer."

In the present invention, once the desired configuration has been specified on the Web page 31, the page is passed to a modification unit 37 in the office unit 35. The configuration details in the modification unit are then passed to a validation unit 38, which is also fed with the details of the order from the order unit 36. The validation unit 38 checks for consistency between the order details and the configuration details. The validation unit is also supplied with general information about the current capabilities of the manufacturer, and checks those details for compatibility with the order details and configuration details (block 14).

Once the configuration details have been validated, they are made available to the control unit 46 in the manufacturing plant. This control unit detects any modification flag in the order details coming from the order unit 36 (block 16) and obtains the corresponding configuration details from the unit 37. Next, the control unit checks those details with the factory database to determine how to implement them (block 17). The control unit then enters the appropriate data into the computer 48 being manufactured (block 18). This will normally involve entering the details in the appropriate ones of the software packages which are being or have been loaded from the software supply line 50. The completed computer is then shipped to the customer (block 19).

In Dharnipragada, "If the order is changed prior to beginning manufacturing of the process device, the change order may be implemented. If the order is changed after the beginning of manufacturing of the process device, the change order is entered into the order database, but the process device will likely be built according to the original order." (col. 6, lines 9-14)

In the invention, the control unit enters appropriate data into the computer being manufactured including entering modification details in appropriate ones of the selected software components which are being installed or have been installed in the computer. (p. 7, line 25 – p. 8, line 2)

In Kroening, "In block 212, the image builder 20 compares the configuration IDs to the configuration history. If the configuration ID corresponds to a previously configured image, then the image builder 20 looks at whether the image is in a storage device 30, as illustrated in FIG. 1. If the image is found in the storage device 30, then block 224 flags the configuration as ready for delivery and notifies an operator of the computerized network 10 that a desired image is ready. Otherwise, if the image is not found in the storage device 30, the image is created by the image builder 20 according to block 216 as a fresh build. As part of the fresh build process, block 230 requires the image builder 20 to process the bill of materials to determine the parameters for building an image according to the desired software configuration and ensure that they are compatible with the customer's hardware, software and special requirements. The final result or output from block 230 is an image or "digital picture" of the desired software configuration according to the bill of materials." (col. 7, lines 23-41)

In the invention, "Once the desired configuration has been specified on the Web page 31, the page is passed to a modification unit 37 in the office unit 35. The configuration details in the modification unit are then passed to a validation unit 38, which is also fed with the details of the order from the order unit 36. The validation unit 38 checks for consistency between the order details and the configuration details. The validation unit is also supplied with general information about the current capabilities of the manufacturer, and checks those details for compatibility with the order details and configuration details (block 14)." (p. 7, lines 12-19)

Knowles teaches a web-enabled system and method for designing and manufacturing laser scanners.

The invention uses the manufacturers web page to place an order for a specially configured computer system.

The fact that a manufacturer web page is utilized in these instances is insufficient to overcome the vast differences between the claimed invention and the combination of references as set forth above.

The invention provides a method of automatically manufacturing a computer. A major difference between the invention and the references involves the handling and implementation of special configuration details.

As detailed below, the Applicants take the position that the Examiner has improperly applied Dharnipragada, Kroening and Knowles.

A. Reference (or references) Fail to Teach or Suggest All Claim Elements

As the PTO recognizes in MPEP §2 142:

The Examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the Examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

The USPTO clearly cannot establish a *prima facie* case of obviousness in connection with the amended claims for the following reason.

35 U.S.C. §103(a) provides that:

[a] patent may not be obtained ... if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said matter pertains ... (emphasis added)

Thus, when evaluating a claim for determining obviousness, all limitations of the claim must be evaluated.

B. Reference (or references) Does Not Suggest Desirability of the Claimed Combination

There is still another compelling, and mutually exclusive, reason why the references cannot be combined and applied to reject the claims under 35 U.S.C. §103(a).

The PTO also provides in MPEP §2142:

[T]he Examiner must step backward in time and into the shoes worn by the hypothetical "person of ordinary skill in the art" when the invention was unknown and just before it was made. In view of all factual information, the Examiner must then make a determination whether the claimed invention "as a whole" would have been obvious at that time to that person. . . . [I]mpermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.

Here, the references, alone or in combination do not teach, or even suggest all the limitations of the claim or the desirability of the combination because neither teaches nor suggests providing the following:

The rejection argues that "Dharnipragada teaches the device selection sequence of instruction assists the software user in selecting technology that meets the process device requirements and then applying the selected technology to process device requirements to define a specific process device. (see col. 5 lines 2-7) During the evaluation process when the technology decision is finalized the software can specify a process configuration for a particular model number. The specific process device is defined with a specification sheet created by the specification sheet 22 ... Once the specification is completed the import status of the Tag is removed allowing the Tag to be exported as required for ordering the specified process device. This specific process device definition is then sent to process device manufacturer to initiate building the specified process device. (see col. 5 lines 15-65) Therefore, the specification

sheet includes modification details to build or each process device. Kroening teaches the image builder coupled to the order entry system selects an appropriate baseline image and determines which incremental images (delta image, containing only additional information beyond the baseline image) are to be layered on top of the baseline image to achieve the desired final configuration. The delta image indicates that there is a modification in the main order (baseline image)."

In the invention, claim 1, lines 6-7, "the customer being required to indicate if a special configuration is desired.

In the specification, p. 7, lines 9-11, "In addition, the customer must include, in the main order which is passed to the order unit 36, an indication that a special configuration is desired for the computer being ordered."

The invention also claims: "the control unit entering appropriate data into the computer being manufactured including entering modification details in appropriate ones of the selected software components which are being installed or have been installed in the computer."

In Dharnipragada, "If the order is changed prior to beginning manufacturing of the process device, the change order may be implemented. If the order is changed after the beginning of manufacturing of the process device, the change order is entered into the order database, but the process device will likely be built according to the original order." (col. 6, lines 9-14)

Thus in Dharnipragada, the inventor may change the order at any time during the manufacturing process and is not "required" to indicate if there is a special configuration.

The invention claims: "passing the special configuration details to a validation unit in the office unit; the validation unit checking the special configuration details for compatibility with details of the main order; upon validation, sending the special configuration details to the control unit; the control unit detecting any modification details in the main order details and obtaining corresponding configuration details from the modification unit; the control unit checking the configuration details with a factory database for implementation;"

In Kroening, "In block 212, the image builder 20 compares the configuration IDs to the configuration history. If the configuration ID corresponds to a previously configured image, then the image builder 20 looks at whether the image is in a storage device 30, as illustrated in FIG. 1. If the image is found in the storage device 30, then block 224 flags the configuration as ready for delivery and notifies an operator of the computerized network 10 that a desired image is ready. Otherwise, if the image is not found in the storage device 30, the image is created by the image builder 20 according to block 216 as a fresh build. As part of the fresh build process, block 230 requires the image builder 20 to process the bill of materials to determine the parameters for building an image according to the desired software configuration and ensure that they are compatible with the customer's hardware, software and special requirements. The final result or output from block 230 is an image or "digital picture" of the desired software configuration according to the bill of materials."

In view of the foregoing, it is impossible to render the subject matter of the claims as a whole obvious based on a single reference or any combination of the references, and the above explicit terms of the statute cannot be met. As a result, the USPTO's burden of factually supporting a *prima facie* case of obviousness clearly cannot be met with respect to the claims, and a rejection under 35 U.S.C. §103(a) is not applicable.

Claims 4, 12-16 and 19 depend from claim 1 and are submitted to be allowable for at least these reasons.

Therefore, there is no support for an obviousness rejection of the claimed subject matter as a whole because the references fail to disclose each element or suggest the missing elements.

### CONCLUSION

Accordingly, it is respectfully submitted that the combination of Dharnipragada, Kroening and Knowles does not teach nor suggest all of the claimed elements and does not suggest the desirability of the claimed combination.

For all of the foregoing reasons, it is respectfully submitted that claims be allowed. A prompt notice to that effect is earnestly solicited.

Respectfully submitted,



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I hereby certify that this correspondence is being transmitted to the United States Patent and Trademark Office, via EFS-Web, on the date indicated below:

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October 25, 2006

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Susan C. Lien

CLAIMS APPENDIX

1. (Previously Presented) A method of automatically manufacturing a computer comprising:
  - a manufacturer providing a manufacturer web page unit, a manufacturer office unit and a manufacturer plant;
  - a customer sending a main order for the computer to the office unit via a web page in the web page unit, the customer being required to indicate if a special configuration is desired;
  - passing elements of the main order to a control unit in the manufacturing plant unit;
  - the control unit controlling manufacturing and supply lines containing a plurality of compatible hardware and selected software components for installation into the computer being manufactured;
  - the customer entering any special configuration details to the web page unit; passing the web page to a modification unit in the office unit;
  - passing the special configuration details to a validation unit in the office unit; the validation unit checking the special configuration details for compatibility with details of the main order;
  - upon validation, sending the special configuration details to the control unit;
  - the control unit detecting any modification details in the main order details and obtaining corresponding configuration details from the modification unit;
  - the control unit checking the configuration details with a factory database for implementation; and
  - the control unit entering appropriate data into the computer being manufactured including entering modification details in appropriate ones of the selected software components which are being installed or have been installed in the computer.
2. – 3. (Canceled)
4. (Previously Presented) The method according to claim 1, further comprising logging the modification details as they are made.

5. – 11. (Canceled)

12. (Previously Presented) The method according to claim 1, further comprising generating an order reference number.

13. (Previously Presented) The method according to claim 1, further comprising accepting the order.

14. (Previously Presented) The method according to claim 1, further comprising processing the special configuration in parallel with the main order.

15. (Previously Presented) The method according to claim 1, further comprising logging the special configuration into a manufacturing log.

16. (Previously Presented) The method according to claim 1, further comprising shipping the order to the customer.

17. – 18. (Canceled)

19. (Previously Presented) The method according to claim 1, further comprising verifying each modification detail against current manufacturing capabilities.

20. – 22. (Canceled).

**EVIDENCE APPENDIX**

There is no evidence submitted pursuant to 37 CFR1.130, 1.131, or 1.132, nor has any other evidence been entered by the Examiner.

**RELATED PROCEEDINGS APPENDIX**

There are no related proceedings, and, thus, no copies of decisions exist.